

## Datasheet: MCA5941GA

<b>Description:</b>	MOUSE ANTI SHEEP IgE
<b>Specificity:</b>	IgE
<b>Format:</b>	Purified
<b>Product Type:</b>	Monoclonal Antibody
<b>Clone:</b>	1E7
<b>Isotype:</b>	IgG2a
<b>Quantity:</b>	0.1 mg

### Product Details

#### Applications

This product has been reported to work in the following applications. This information is derived from testing within our laboratories, peer-reviewed publications or personal communications from the originators. Please refer to references indicated for further information. For general protocol recommendations, please visit [www.bio-rad-antibodies.com/protocols](http://www.bio-rad-antibodies.com/protocols).

	Yes	No	Not Determined	Suggested Dilution
Flow Cytometry			▪	
Immunohistology - Frozen	▪			
Immunohistology - Paraffin			▪	
ELISA	▪			1/500 - 1/2000
Immunoprecipitation			▪	
Western Blotting	▪			
Immunofluorescence	▪			

Where this product has not been tested for use in a particular technique this does not necessarily exclude its use in such procedures. Suggested working dilutions are given as a guide only. It is recommended that the user titrates the product for use in their own system using appropriate negative/positive controls.

<b>Target Species</b>	Sheep
<b>Species Cross Reactivity</b>	Reacts with: Goat Does not react with: Horse, Human <b>N.B.</b> Antibody reactivity and working conditions may vary between species.
<b>Product Form</b>	Purified IgG - liquid
<b>Preparation</b>	Purified IgG prepared by affinity chromatography on Protein G from tissue culture supernatant
<b>Buffer Solution</b>	Phosphate buffered saline
<b>Preservative Stabilisers</b>	0.09% Sodium Azide (NaN <sub>3</sub> )
<b>Approx. Protein Concentrations</b>	IgG concentration 0.5 mg/ml
<b>Immunogen</b>	Recombinant ovine IgE1-2 expressed in <i>E.coli</i>

---

**Specificity**                      **Mouse anti Sheep IgE, clone 1E7**, recognizes ovine Immunoglobulin E (IgE) and does not cross react with ovine IgM, IgA, IgG1 or IgG2.

IgE is an immunoglobulin primarily produced from plasma cells and, in normal serum, present at very low concentrations. Western blot analysis against affinity purified ovine IgE using Mouse anti Sheep IgE clone 1E7 demonstrates a single major band of approximately 80 kDa under reducing conditions, and a band at approximately 200 kDa is observed after electrophoresis under non-reducing conditions. These bands correspond with the expected molecular weights of the epsilon chain and the complete ovine IgE molecule ([Kooyman, F.N. et al. 1997](#)).

IgE is important in both type 1 hypersensitivity and immunity to parasite infections, in particular parasitic worm infections. Mouse anti Sheep IgE, clone 1E7 has been used in a number of studies involving parasite nematode infections of sheep by *Haemonchus contortus* ([Vervelde, L. et al. 1997](#) and [Kooyman, F.N. et al. 1997](#)). Clone 1E7 has also been reported to recognize bovine IgE, and, as such, it is useful for studies of infection in cattle by nematode worms such as *Dictyocaulus viviparus* ([Bricarello, P.A. et al. 2007](#) and [Kooyman, F.N. et al. 2002](#)).

In addition to this specific anti IgE monoclonal antibody, monoclonal antibodies specific to both bovine and ovine, IgA, IgM and IgG subclasses are available from Bio-Rad.

---

**References**

1. Bricarello, P.A. et al. (2007) Field study on nematode resistance in Nelore-breed cattle. [Vet Parasitol.148:272-8](#)
2. Vervelde, L. et al. (2003) Vaccination-induced protection of lambs against the parasitic nematode *Haemonchus contortus* correlates with high IgG antibody responses to the LDNF glycan antigen. [Glycobiology 13:795-804](#)
3. Kooyman, F.N. et al. (2002) Serum immunoglobulin E response in calves infected with the lungworm *Dictyocaulus viviparus* and its correlation with protection. [Parasite Immunol. 24:47-56](#)
4. Kooyman, F.N. et al. (1997) Production of a monoclonal antibody specific for ovine immunoglobulin E and its application to monitor serum IgE responses to *Haemonchus contortus* infection. [Parasitology 114:395-406](#)

---

**Storage**                              Store at +4°C or at -20°C if preferred.  
This product should be stored undiluted.  
Storage in frost free freezers is not recommended. Avoid repeated freezing and thawing as this may denature the antibody. Should this product contain a precipitate we recommend microcentrifugation before use.

---

**Guarantee**                            18 months from date of despatch

---

**Health And Safety Information**      Material Safety Datasheet documentation #10040 available at:  
10040: <https://www.bio-rad-antibodies.com/uploads/MSDS/10040.pdf>

---

**Regulatory**                            For research purposes only

---

## Related Products

### Recommended Secondary Antibodies

- Goat Anti Mouse IgG IgA IgM (STAR87...) [Alk. Phos.](#), [HRP](#)
- Goat Anti Mouse IgG (STAR77...) [HRP](#)
- Rabbit Anti Mouse IgG (STAR12...) [RPE](#)
- Rabbit Anti Mouse IgG (STAR8...) [DyLight®800](#)

Rabbit Anti Mouse IgG (STAR13...) [HRP](#)  
Goat Anti Mouse IgG (STAR76...) [RPE](#)  
Goat Anti Mouse IgG (STAR70...) [FITC](#)  
Goat Anti Mouse IgG (Fc) (STAR120...) [FITC](#), [HRP](#)  
Rabbit Anti Mouse IgG (STAR9...) [FITC](#)  
Human Anti Mouse IgG2a (HCA037...) [FITC](#), [HRP](#)  
Goat Anti Mouse IgG (H/L) (STAR117...) [Alk. Phos.](#), [DyLight@488](#), [DyLight@680](#),  
[DyLight@800](#), [FITC](#), [HRP](#)

## Recommended Useful Reagents

[MOUSE ANTI BOVINE IgG1 \(MCA627GA\)](#)  
[MOUSE ANTI BOVINE IgA \(MCA2438GA\)](#)  
[MOUSE ANTI BOVINE IgA:HRP \(MCA2438P\)](#)  
[MOUSE ANTI BOVINE IgG \(MCA2439GA\)](#)  
[MOUSE ANTI BOVINE IgG1 \(MCA2440GA\)](#)  
[MOUSE ANTI BOVINE IgG:HRP \(MCA2439P\)](#)  
[MOUSE ANTI BOVINE IgG1:HRP \(MCA2440P\)](#)  
[MOUSE ANTI BOVINE IgG2 \(MCA2441GA\)](#)  
[MOUSE ANTI BOVINE IgG2:HRP \(MCA2441P\)](#)  
[MOUSE ANTI BOVINE IgM \(MCA2443GA\)](#)

<b>North &amp; South America</b>	Tel: +1 800 265 7376 Fax: +1 919 878 3751 Email: <a href="mailto:antibody_sales_us@bio-rad.com">antibody_sales_us@bio-rad.com</a>	<b>Worldwide</b>	Tel: +44 (0)1865 852 700 Fax: +44 (0)1865 852 739 Email: <a href="mailto:antibody_sales_uk@bio-rad.com">antibody_sales_uk@bio-rad.com</a>	<b>Europe</b>	Tel: +49 (0) 89 8090 95 21 Fax: +49 (0) 89 8090 95 50 Email: <a href="mailto:antibody_sales_de@bio-rad.com">antibody_sales_de@bio-rad.com</a>
----------------------------------	---	------------------	---	---------------	---

'M352946:190408'

Printed on 11 Oct 2019

---

© 2019 Bio-Rad Laboratories Inc | [Legal](#) | [Imprint](#)